

ARTERIAL SPASM AND FAT METABOLISM: THEIR RELATION TO CERTAIN DISEASES AND TO CERTAIN MEMBERS OF THE VITAMIN B COMPLEX

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IN collaboration with Dr. Agnes Fay Morgan at the Department of Home Economics laboratories in Berkeley, California, the author of this preliminary report has been engaged for several months in studying the bloods of a series of tuberculosis patients from the California Sanatorium at Belmont. Also a number of patients having cardiovascular diseases; some patients having Meniere's Disease; a few allergic patients and a few aging people with very few physical defects. Microbiological methods were used in carrying on these studies.

Previous observations by other investigators¹ apparently have proved the relationship of choline deficiency to fatty liver, and that the administration of choline may need the addition of inositol and pyridoxine to help in the relief of the condition. It has also been shown that choline² is necessary in certain cases of Vitamin A deficiency to pull the A factor into the blood stream. From this it would appear that a combination of the B complex appears to be the factor missing, and that is needed by Vitamin A, for an improvement or prevention in the common cold-catching tendency.

Microbiological studies show that pantothenic acid plays a very important rôle in the metabolism of fat—indeed, in Agnes Fay Morgan's study of the dog, Benny, made gray-haired by this deficiency, an autopsy showed a very diffuse deposit of fat in the liver. Blood riboflavin, pantothenic acid and in a few patients, nicotinic acid, were found to be low in our series of cases.

Thirty-seven patients have been studied. These, according to their diseases, were listed: tuberculosis, 10; cardiovascular, 13; hypertension, 5; coronary disease, 2; arteriosclerotic disease, 3; intermittent claudication, 2; Meniere's Disease, 4; migraine, 1; arthritis, 1; allergy, 1; tinnitus aureus, 2; nerve deafness, 1; no specific diagnosis, 4.

Nearly all patients showed increase of blood fat—cholesterol. This finding has an added importance because of the reports of Leahy and his group in Boston, that animal fats, such as egg yolk, cream, and butter, appear to play an exceedingly important rôle in arteriosclerosis. The importance of cholesterol in coronary disease has recently been emphasized.³ Cholesterol also appears to hold a definite spot among the various factors associated with Meniere's Disease.

From these preliminary studies, it is suggested that the combination of the factors of the B complex known to influence blood vessel spasm, plus all the other unknown factors, promise considerable relief, especially when used early, in many conditions known to be related to spasm. In more advanced cases extremely large doses are necessary.

It is quite possible that more extensive laboratory studies of the bloods of a large group of cardiovascular patients may prove that these involve a disturbance of fat metabolism, just as diabetes is due to a defect of sugar metabolism. The author would be happy to receive comments on the suggestions above made.

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REFERENCES

1. Best, C. H., Girsher, J. N.: Patterson, "The Control of Deposition of Liver Fat," *Am. J. Physiol.*, Vol. 101:179, 1942.

Best, C. H., "Choline as a Dietary Factor"; "Vitamins and Endocrines," published by the Academic Press, Inc., 125 East 23rd Street, New York.

No authors mentioned. "Dietary Factors and Fatty Liver," *Nutrition Review*, April, 1942.

Engels, R. W., "The Relation of B Vitamins and Dietary Fat to the Lipotropic Action of Choline," *J. Nutrition*, Vol. 24:175, 1942.

2. Abels, J. C., Gorham, A. T., Pack, G. T., and Rhoads, C. P., "Plasma Vitamin Levels in Patient with Malignant Disease Particularly of the Gastro-Intestinal Tract," *J. Clin. Investigation*, 20:749 (Nov.), 1941.

3. Leahy, Thomas, "The Most Important Professional Disease," *Proceedings of the California Academy of Medicine*, 1939-1940.

Musser, J. H., "The Doctor's Disease," *Proceedings of the California Academy of Medicine*, 1937-1938.

IS THE ORGANIZED MEDICAL PROFESSION ANTISOCIAL?

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Foreword.—The article which follows was sent to CALIFORNIA AND WESTERN MEDICINE, in January, 1942. This contribution by Dr. Porter, former Dean of the Medical School of the University of California, should be of special interest to members of the California Medical Association, in relation to the proposed compulsory sickness insurance bills that are now under consideration by the California Legislature.—*Editor.*

IS the organized medical profession antisocial? Does our community of citizens get the best medical service that the 180,000 medical men of the United States is competent to give?

Are there too many specialists. Has medicine lost Hippocratic spirit, forgotten that "where there is love of the art, there also is the love of man"?

Has it become greedy and lustful for wealth? Has it become trade-minded and organized itself as a trade union allowing the material interests and its craft pride to dominate and direct it?

To the grief and embarrassment of American doctors these questions are being asked and asked again. And the doctors conscious that medicine has advanced more in the past fifty years than in any previous 5,000 are bewildered and embarrassed at what they take to be a vicious unwarranted attack. Yet they know that it is no new thing that their profession has been the target of abuse ever since the healing art first tried to free itself from magic.

Robert Hutchinson's anthology "For and Against Doctors" quotes comments on physicians written in various epochs from the 6th century B. C. to the 20th century A. D. and the againsts loom larger by far than the for. The Doctor, sore and surprised, taking stock of his detractors finds that the most vociferous and unrelenting of these are in the group of the social service workers, a profession new born in the 20th century and as he regards them and their volunteer satellites and sympathizers his gorge rises and he is impelled to ask some questions—cogent and barbed questions to match those the social service group hurl at him.

What does the social worker know of physiology and pathology of the causes of disease, pharmacology, therapeutics and pharmacy? Not knowing these things what right has the social worker to judge what is and what is not adequate medical care?

Has not the social service worker an ego so inflated that only his own opinion bears any weight? Is it not true that the Lady Bountiful complex has overbalanced the judgment of social workers who dispense not their own monies, but tax funds or philanthropic contributions? Is it not true that the loss or lack of judgment creates the blind spot that prevents the social worker from being just to the profession which has worked so successfully to wipe out disease that the communicable diseases which were scourges fifteen, even thirty years ago today are almost forgotten. Does not that same blind spot prevent

them from admitting that nowhere in the world nor at any period in history has such superlative medical service been available to any people as live in the United States in 1938. Is it not true that the social worker group seizes upon the few crooks, incompetents and careless that the medical profession as a human institution must include and set up their errors and crimes as typical of the whole profession's care of the sick and interest in the human welfare.

It is hardly probable that the doctor and the social worker could be brought to agree about the character and extent of the doctor's task nor about his place in society, and equally it is doubtful if either one's ideas on the subject would agree with the thoughtful citizen in his estimates.

The citizen who is not friend, or aid, or wife, rarely gives the doctor a thought except when fear of death or pain or a demand for payment of the services a doctor has rendered arouses him.

No one untrained in medicine can possibly visualize what a doctor really can accomplish, nor the limitations of his power to accomplish, and only a few can understand the sources of those powers and limitations. Nowhere is the proverb "a little knowledge is a dangerous thing" better illustrated than in the case of the social worker whose training gives a glimpse, and no more, of the surface aspects of the doctor's problems, but in a light that does not and cannot illuminate the depths? Like all other people without medical training the social worker's opinions about the work of doctors must be tintured by emotions aroused by contact with sick people and the doctors who serve them. Emotion is a certain inhibitor of clear observation and judicial minded deduction. It matters not whether the emotion is love or hate, sympathy, professional pride or personal egotism.

On behalf of the social worker it can be said that the doctor basks his ego in the sunlight of that authority which has come down to him through the ages—an authority that began in the past whose beginnings are lost in the temples that were ruins when the temples of Aesculapius began to flourish in Greece. Insensitive as some of them may be to spiritual things, faced by pain, by birth, by death, by the loss of reason the hard bitten race of moderns still admits that there are mysteries inherent in existence. Face to face with these mysteries almost any mortal is fearful and reaches out eagerly for comfort, for a comforter and has faith in the magic name "physician." And it is another of existence mysteries that so rarely is their faith in the frail human being, the physician, betrayed.

The social worker also can plead, and truly, that the doctor's training tends to make him interested in diseases rather than in health and the individual who has been broken under the stress of life secures his care and effort, rather than the individual who is threatened with breakdown. Repair, the cobbling of broken bodies, rather than preventing, the accusing voice declares, is his pre-occupation, and here the testimony is strengthened by what the public health officer has to say of his colleague, the practitioner. Such comments rouse distrust in the medical profession. Do these critics ever emphasize the enormous burden of free and almost free-care the doctors of the United States assume on behalf of the needy who are under financial stress, not by any means all of them indigent?

Do these critics of the doctor, they who are self righteous and ignorant, take pains to find out what the doctors job is? What he gives, what his patients receive? Do they consider for a minute that relation of patient to doctor, that relation of friend to needy friend? They do not! Or at least the doctor they so bitterly attack, believes that they do not.

And finally the physician asks: How far are they

influenced by the advantages and social importance that will accrue to their own profession if they can displace the medical profession from its present status of authority and social importance? Furthermore as an individual with a firm faith in what he believes to be the superior way of American democracy, he asks to what degree does this attack represent the social workers conversion to and enthusiast's evangelization for collectivism and paternal state? Such are the questions formulated by one side and the other, and hurled like hand grenades across the entrenchments of dislike and misunderstanding!

Truth is at the heart of each of these questions. But as in every other controversy, neither side has been willing carefully to examine the other's: point of view, contentions, rights and ways. In these times, in every social field, the murk of a myriad opinions obscures the light of truth. Nowhere is the fog thicker than in the field of medical service to the modern American community.

PENICILLIN TREATMENT FOR GONORRHEA*

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DURING the past nine months, 225 cases of gonorrhea have been treated with penicillin at this Station Hospital. The results obtained and the impressions gained by the medical staff may be of benefit to those members of the medical profession who will soon be using the drug for the first time.

The penicillin was administered in different dosages and at varying time intervals, depending upon the project then under investigation. A more complete paper giving the results of these different methods of administration will soon be published by other authors, through whom the results of this particular group of cases, as well as several other groups, must be cleared; however, it is felt that the impressions and experiences of one who has treated these patients first-hand will be of interest. In order to more clearly bring out the different points of interest, the data to be presented will be divided into three different groups determined by the method of treatment used.

NOT A "CURE-ALL"

It should be emphasized at the beginning of this paper that while penicillin is a drug of greater potency and value against gonorrhea than any other available therapeutic agent, it is still not a "cure-all" and will not produce 100 per cent results by itself. The factors of patient coöperation, proper hygiene, systematic care and careful "follow-up" are still of primary importance. When one has the responsibility of treating patients, these factors loom ever and ever more important and they are points that will not appear in any column of figures or statistics. For that reason special mention is made of them at this early point in the paper.

* From the Station Hospital, March Field, California, December, 1944.

Note. It is desired to express due appreciation and thanks to Pfc. Felix Haupel and Pfc. Donald Nichols of this hospital command, whose conscientious thought and efforts in maintaining the necessary records throughout the gathering of this material, made the results of definitely greater value.

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